

Hello, I'm Robert Henke with ICF International and I'm pleased to be working with the BLM's National Training Center and the Wyoming State Office, as well as with the Western Electricity Coordinating Council, otherwise known as WECC, to bring you the latest Planning/NEPA Forum. This is a series of programs highlighting important topics on planning and the National Environmental Policy Act in the BLM.

Today's webinar is entitled Corridors, Reliability and Transmission Line Siting, and is a departure from BLM's usual interactive broadcast format. We hope you like it, but you'll have the opportunity to tell us what you think when you fill out the evaluation you'll receive after the program.

As you could see from our first slide, there is no shortage of proposed transmission lines in the western United States. This slide was provided by WECC's Subregional Coordination Group, which is part of their Transmission Expansion Planning Policy Committee and it clearly shows the potential transmission projects by the year 2020. Many of these proposed transmission lines reflect in part the response to state renewable portfolio standards, or RPSs, which require specific percentages of electric power to be generated by renewable energy sources such as solar, wind, geothermal and biomass. Proposals for new transmission lines such as those shown on this slide raise

three important and intersecting issues related to transmission line siting, corridors and reliability that today's speakers will address.

The next two slides are intended to help you visualize these issues, and I want to acknowledge Mr. Kip Sikes of Idaho Power for providing them. This slide shows typical transmission and distribution structures, and this webinar focuses on issues related to transmission lines, not distribution lines. This slide is helpful in depicting the different structures with distribution lines being on the right side of the slide, and transmission and subtransmission lines on the left side.

The next slide is slightly different in that it shows typical heights and right-of-way widths for transmission power structures. Right-of-way widths and power height are directly related to the environmental and reliability issues discussed by today's speakers.

The first issue discussed in this webinar is transmission line siting. The BLM administers about 260 million acres in the west, which means there is a good chance that any long linear feature, like a transmission line, will intersect BLM-administered lands, and thus need to go through the processes of a right-of-way application and the National Environmental Policy Act. Mr. Walt George, National Project Manager located in the BLM Wyoming State Office, will discuss BLM's approach to managing linear facilities in corridors. It is important to note the transmission lines crossing other non-BLM federal lands are also subjected

to similar processes, however, today's discussion is limited to BLM's requirements.

The second issue is one of reliability. The Western Electricity Coordinating Council, again referred to as WECC, addresses the issue of reliability through what it refers to as the transmission line path rating process. Mr. Brian Keel of Salt River Project, or SRP, chairs WECC's Reliability Subcommittee, which is currently reviewing WECC's system performance criteria requirement. This requirement addresses the contingency of two adjacent transmission circuits on separate towers in a common corridor.

Now I know there may be some new words in there for some of you, so let me explain contingency. In the world of electric reliability, a contingency is the unexpected loss of one or more electric system facilities, like a transmission line, caused by a single initiating failure or outage. Brian will explain this as well as other features of WECC's path rating process, and the status of his subcommittee's current evaluation of the system performance criteria requirement.

The third and last issue is the separation distance between high voltage transmission lines needed to ensure a certain reliability, while considering environmental impacts, right-of-way costs, and maintenance. In general, land use objectives and environmental considerations tend to drive transmission lines

closer together while reliability objectives tend to drive transmission lines further apart. Dr. Venkat Banunarayanan, an electrical engineer with ICF International, will discuss a framework the company developed for determining the minimum separation distance between high voltage transmission lines.

And with that brief introduction, we will now begin with our first speaker, Mr. Walt George of the BLM.